RONALD ROSENBERGER 506 STERLING ST. NEWTOWN, PA 18940 (215) 579-9871

APPLICATION FOR PATENT

SCENTED TIRES

SCENTED TIRES

CROSS REFERENCE TO RELATED APPLICATION

This application claims the benefit of U.S. Provisional Patent Application Serial No. 60/463,653, filed April 17, 2003.

BACKGROUND OF THE INVENTION

The Prior Art shows numerous examples of patents being awarded for inventions where the addition of scent provides novelty to articles used in everyday living.

- U.S. Patent Number 6,666,900 issued December 23, 2003, to <u>Chandaria</u>, discloses a Scented Firelog.
- U.S. Patent Number 6,656,256 issued December 2, 2003, to Moreland, discloses Scented Jet Printer Ink.
- U.S. Patent Number 6,430,764 issued August 13, 2002, to <u>Peters</u>, discloses an Herbal-Scented Pillow.
- U.S. Patent Number 6,415,741 issued July 9, 2002, to <u>Suchowski et al</u>, discloses a Scented Chew Toy.
- U.S. Patent Number 6,381,984 issued May 7, 2002, to <u>Russo et al</u>, discloses Scented Jewelry.
- U.S. Patent Number 6,357,260 issued March 19, 2002, to <u>Lutz</u>, discloses a Scented Bracelet Kit.
- U.S. Patent Number 6,217,242 issued April 17, 2001, to <u>Cote</u>, discloses a Scented Writing Implement.
- U.S. Patent Number 6,012,963 issued January 11, 2000, to <u>Lee</u>, discloses a Scented Doll Assembly.
- U.S. Patent Number 5,826,598 issued October 27, 1998, to Meehan, discloses a Scented Hair Accessory.

- U.S. Patent Number 5,817,385 issued October 6, 1998, to <u>Stanislav</u>, discloses a Scented Transferable Tattoo.
- U.S. Patent Number 5,795,644 issued August 18, 1998, to <u>Delarosa</u>, discloses Scented Bubble Wrap.
- U.S. Patent Number 5,779,519 issued July 14, 1998, to <u>Oliver</u>, discloses a Scented Fingernail File and Buffer.
- U.S. Patent Number U.S. Patent Number 5,110,584 issued May 5, 1992, to Medri et al discloses Scented Nail Enamels.
- U.S. Patent Number 5,077,102 issued December 31, 1991, to <u>Chong</u>, discloses a Scented Artificial Flower.
- U.S. Patent Number 4,762,493 issued August 9, 1988, to <u>Anderson</u>, discloses Scented Crayons.
- U.S. Patent Number 4,283,011 issued August 11, 1981, to Spector, discloses a Scented Sticker.
- U.S. Patent Number 3,946,782 issued March 30, 1976 to <u>Petrasek et al</u> discloses a pneumatic tire with light reflective elements; however, the light reflective elements are recessed, and teach away from the present invention in that the light reflective elements are not intended to be erodible due to the fact that they are recessed. Furthermore, the light reflective elements do not comprise embodiments comprising the use of scent.

Application 20020170645 dated November 21,2002 by Norwood et al discloses "a vehicle tire with light reflective members", and also teaches how the light reflective member is fused into the tire in the tire mold during vulcanization; however, the light reflective members are recessed. As in Petrasek et al, Norwood et al also teaches away from the present invention in that the light reflective members are not intended to be erodible, and are therefore recessed. Furthermore, the light reflective members do not comprise embodiments comprising the use of scent.

U.S. Patent Number 4,604,604 issued August 5, 1986, to Mann, discloses a material wear indicator for a brake lining or clutch pad, where the material wear indicator emits a scent,

and/or colored smoke as a danger warning at a predetermined level of pad wear, with the pad being non-odorous or unscented until the occurrence of the dangerous wear condition of the pad. This teaching can be adapted to illustrate how the disclosed tire can incorporate wear warning means. The 4,604,604 patent is hereby incorporated by reference.

U.S. Patent Number 5,603,367 issued February 18,1997 to <u>Watenabe</u>, teaches a method for producing a tread surface of a "slippage prevention" tire where the compound comprises sand, ceramic particles, and fiber reinforced resin particles. Also disclosed are prior art tire compounds comprising eggshells, metal pieces or walnut pieces. This teaching illustrates the addition of foreign materials to a tire compound, and can be adapted to illustrate the addition of scent and/or fragrance to a tire compound. The 5,603,367 patent is hereby incorporated by reference.

U.S. Patent Number 6,334,974 issued January 1, 2002 to <u>Chen</u>, teaches dipping microporous plastics in fragrant oil to form fragrant grains, mixing the grains with polyolefin, and then injection-molding the mixture to form fragrant plastic containers. This teaching can be adapted to illustrate how the disclosed tire materials, finished tire, or even novelty scented plugs or inserts, can be coated with or steeped in a scenting or fragrancing means. The 6,334,974 patent is hereby incorporated by reference.

U.S. Patent Number 6,474,382 issued November 5, 2002 to <u>Finck</u>, teaches a tire with color compounds, including a colored tread, and can be adapted to teach how a given tire can be colored in accordance with a given scent, as in a cherry scented red tire. The 6,474,382 patent is hereby incorporated by reference.

U.S. Patent Number 3,991,802 issued November 16,1976 to <u>Yokoda et al</u> teaches a special metal studded tire. This teaching can be adapted to demonstrate a tire that is fashioned to accept plugs or inserts of the present invention in place of the metal studs installed in the tire disclosed in <u>Yokoda et al</u>. The 3,991,802 patent is hereby incorporated by reference.

U.S. Patent Number 5,845,797 issued December 8,1998 to <u>Sudo et al</u>, discloses a rubber plug for a drug vessel that "can be produced from a rubber plug-producing rubber composition by compression molding, transfer molding, injection molding, or the like". This teaching can be adapted to illustrate means on how the disclosed novelty scented plugs or inserts can be fabricated. The 5,845,797 patent is hereby incorporated by reference.

U.S. Patent Number 5,957,136 issued September 28, 1999 to <u>Magidson et al</u>, teaches "the earplug of the present invention can be fabricated by any suitable polymer molding techniques such as by injection molding." This teaching can be adapted to illustrate means on how the disclosed novelty scented plugs or inserts can be fabricated. The 5,957,136 patent is hereby incorporated by reference.

U.S. Patent Number 6,344,160 issued February 5, 2002 to <u>Holzburg</u> discusses metal casting processes such as sandcasting, permanent molding, diecasting, investment casting, shell molding, lost foam casting, and discusses the use of composite structural plastics to produce objects in place of equivalent metal parts. These teaching can be adapted to illustrate means on how the disclosed novelty scented plugs or inserts can be fabricated. The 6,344,160 patent is hereby incorporated by reference.

U.S. Patent Number 4,009,624 issued March 1, 1977 to Nishino, teaches an apparatus for mending a puncture in a tubeless vehicle tire using an unvulcanized rubber plug that is installed, then vulcanized, and thus becomes integral with the vehicle tire. This teaching can be adapted to illustrate installing a novelty plug or insert in a tire during the manufacturing process. The 4,009,624 patent is hereby incorporated by reference.

"How Tires Work", from the Website "HOW STUFF WORKS.COM/TIRE", illustrates the various parts of a vehicle tire, and clearly explains making a tire. "How Tires Work" is hereby incorporated by reference.

These numerous examples demonstrate how scent or fragrance add novelty to old and well known everyday items, as will be seen in the following disclosure. The following disclosure is unusual in that erosion and wear comprise attributes that are actually sought after, and act as means that facilitates the disclosed matter.

SUMMARY OF THE INVENTION

One embodiment of the present invention is a rubber vehicle tire, such as an automobile tire, where the rubber compound or formulation comprising the tire is enhanced with a novelty scent or fragrance. The intended purpose of embellishing a tire with a novelty scent or fragrance is to provide a marketable feature to end-users. For example, car owners are known to spent considerable amounts of time and money customizing their vehicles with an endless assortment of special items, whether it is a two kilowatt audio system, a custom paint job, alloy wheels, special lighting systems, etc. The car customization industry is ever growing, with some owners making considerable personal sacrifices in order to afford the latest trend in vehicle customization. Motorcycles are another cause of spending, where, regardless of the economy, there seem to be many individuals willing to plunk down thirty, forty, or fifty thousand dollars, and often more, for a highly customized, boutique motorcycle. Such consumers are perfect candidates for novelty scented motorcycle tires.

In many scent related disclosures not having anything to do with the present invention, scent is used to mask offensive odors, such as room deodorizers. This is not the case with the present invention, where the unique aroma due to the novelty scent or fragrance added to a given vehicle tire comprises a salient, distinguishing, and marketable feature of the tire, and may comprise any desired novelty scent or fragrance. The novelty scented tire gives off a unique aroma when at rest, or when the tire is in use. Friction, heat buildup, and wear due to use is an effective means of releasing the aroma; and wear of the vehicle tire serves to expose fresh surface area of the novelty scented rubber compound or formulation.

Many customized car or motorcycle owners enjoy "smoking" their tires, which is caused by engaging the braking system of the car or motorcycle while "mashing" the gas pedal or throttle, thus causing the tire(s) to spin against the pavement, and produce smoke. It appears reasonable that such users could enjoy the practice even more if the produced "smoke" was imbued with pleasant aromas such as vanilla, lemon, cherry, etc., or even less usual scenting aromas, such as beer, flatulence, or cannabis, as a result of the novelty scented rubber compound or formulation.

Novelty scented tires could have an appeal to more reserved drivers as well. Many individuals enjoy the "new car smell", so much so that a new vehicle that features novelty scented tires, where the novelty scent consists of the "new car smell", may be used as a selling point for a particular brand of new car. Such would present an opportunity for prospective buyers to not only "kick the tires" when shopping for a new car, but to bend over and *smell* them as well. While some could consider such an aspect to be trivial, the aspect at least gives the salesman one more way to engage in or continue a sales discussion with a prospect. Also, a given tire may incorporate an aroma, scent, or fragrance that shows evidence of stimulating a buying behavior, either for the tires themselves, or for the vehicle bearing the tires.

Novelty scented tires could also provide a means of product differentiation for the manufacturer as well. For instance, a given tire manufacturer tends to have at least several large nationwide tire retailers selling its products. Such a manufacturer can offer a given retailer a special distinguishing novelty scent offering not available to the other retailers, without changing or compromising the performance, tread design, and/or safety features of the basic tire product. Also, the manufacturer can choose to offer "limited editions" of novelty scented tires, such as doing limited runs of a new aroma for a given model of tire at a given periodic interval.

Also, any kind of pheromone or pheromones may be used in addition to, or in place of the novelty scent or fragrance agents in a tire. For example, pheromones that suggest or indicate the ability to attract members of a desired gender can be used in a given tire, and may possibly help a young man that "smokes" his tires to be regarded as a heartthrob, instead of a jerk, by young women witnessing such behavior. Pheromones that suggest or indicate the ability to induce a buying behavior can prove very useful, such as where tires that incorporate one or more such pheromone(s), or combination of pheromone(s) and novelty scent or fragrance, can induce a buying behavior for the tires themselves, or for the vehicle that said tires are affixed. Such would enable a given vehicle maker that is the only maker to employ tires comprising pheromones to have a unique and effective means of promotion, being that vehicles that have already been sold and are traveling the highways are interacting with and influencing prospective buyers everywhere due to the pheromone(s) content of the tires.

Also disclosed is where scent is used as a wear warning for a vehicle tire, and other types of wear warnings are presented as well. Finally, a less invasive means for scenting a vehicle tire comprising a novelty plug or insert is disclosed. The novelty plug or insert comprises varied attributes in addition to, or in place of, scent that enables customization of the disclosed tire, and in other vehicle tires as well.

DETAILED DESCRIPTION OF THE INVENTION

The disclosed scented vehicle tire may be realized in myriad ways and combinations. Scent may be made apparent in the vehicle tire by incorporating novelty scent or fragrance in or on the rubber compound(s) comprising a given vehicle tire, in or on any of the non-rubber components of a given tire, or on any combination of a given tire's rubber compound(s) and non-rubber components.

Any of the countless formulations of vehicle tire rubber compound may incorporate novelty scent or fragrance using any possible means, comprising where at least one (with more than one being a possibility) novelty scent or fragrance is added as an ingredient to one or more of the tire's rubber compound(s); where one or more novelty scent or fragrance capsules or microcapsules comprising at least one novelty scent or fragrance

are placed in any of the rubber compounds of the tire itself, where the capsulated means ruptures with exposure due to wear, thereby releasing the novelty scent or fragrance; etc. A less desirable, yet disclosed embodiment is where at least one novelty scent or fragrance is externally applied to the rubber, and is not intrinsic to the rubber compound itself, which can occur at any time in the process, such as before, during, or after the tire is molded and/or vulcanized. For purposes of this disclosure, rubber materials comprising any possible means of novelty scent or fragrance enhancement is known as novelty scented rubber compound.

Any of a vehicle tire's non-rubber components, comprising items such as tire plies or steel belts, may incorporate novelty scent or fragrance, using any means for doing so. For example, capsules or microcapsules of novelty scent or fragrance may be embedded in any of the non-rubber components of the tire, such as the steel belt or plies of the tire. Also, the non-rubber components of the tire may be coated and/or formulated with novelty scent or fragrance, such as coating and/or formulating the steel belt(s) or plies of the tire with novelty scent or fragrance.

Regardless of the method or embodiment, what is important is that the aroma that results from adding novelty scent or fragrance to a given vehicle tire is a salient, distinguishing, and marketable feature of the tire, and is not intended to merely mask the intrinsic smell of the tire per se.

The scenting agent(s) for the novelty scented rubber compound may comprise any scent producing agent(s) such as those comprising, but not limited to, water, oil, or glycol soluble scents, in any range of fragrance concentration that achieves the desired aesthetic result. The aroma of the scenting agent(s) may comprise any desired aroma, such as citrus scents (lemon, orange, etc.), fruity scents (coconut, cherry, etc.), spice scents (cinnamon, vanilla, etc.), to the abovementioned less usual scenting aromas (beer, flatulence, cannabis, etc.). Also, the scenting agent(s), as used in the novelty scented rubber compound and/or non-rubber tire components, may comprise any kind(s) of

pheromone(s) in place of, or in addition to, the abovementioned at least one novelty scent or fragrance.

Novelty scented vehicle tires may comprise tires for any vehicle, such as: tires for vehicles comprising automobiles, sports utility vehicles and minivans; very large tires, such as tires for vehicles comprising heavy machinery work vehicles, "monster" trucks, farm equipment, and aircraft; large tires for commercial vehicles comprising trucks and buses; tires for motorcycle type vehicles comprising motorcycles, scooters, or motorbikes; tires for miscellaneous vehicles comprising all-terrain vehicles, golf carts, or go carts; and tires for bicycle type vehicle, comprising bicycles, unicycles, tricycles, or even exercise bikes.

Also, it is known in the art for a singular tire to have multiple occurrences of rubber compound, such as one type of rubber compound for the tread, another type of rubber compound for the rubber coated plies of a tire, and other rubber compound components of a tire, such as a sidewall, or the tire valve stem. It is also possible to have a tread comprising more than one type of rubber compound, or for the tread to comprise separate segments of the same rubber compound, either across the width of the total tire tread, or in layers along the depth of the tread. Of these "multiple occurrences" of scented rubber compound, it is disclosed that a vehicle tire can comprise "at least one" of these novelty scented rubber compounds. Also, it is possible, in the instance of a tire that uses a plurality of novelty scented rubber compounds, for the scent of each of the said plurality of novelty scented rubber compounds to comprise the same, similar, or different scents. This presents the opportunity for interesting variants. For example, a tire tread can have two (or more) layers of differently scented rubber compounds, where the outside half of the tire tread depth gives off a cherry aroma, then when the tread wears down, the inside half of the tire tread depth gives off a lemon aroma.

Also, it is possible for the disclosed vehicle tire to comprise "at least one" scented non-rubber tire component. Furthermore, the tire may comprise a plurality of novelty scented non-rubber components, where the scent of each of the said plurality of novelty scented

non-rubber components could comprise the same, similar, or different scents and/or pheromones. It is disclosed that a given scented vehicle tire can comprise "at least one" novelty scented rubber compound *and/or* "at least one" novelty scented non-rubber component.

Given the range of potential implementations regarding scented rubber compounds, scented non-rubber components, the range of potential scents or fragrances, the combining of varied scents or fragrances in the same scented rubber compounds and/or non-rubber components, and/or allowing different scents in each of a plurality of separate rubber compounds and/or non-rubber components, not to mention the numerous types of vehicle tires, the range of embodiments for a scented vehicle tire is indeed large.

This disclosure may be modified to where strategic placement of scented rubber compounds acts as a wear warning for excess tire wear. It is possible for the disclosed vehicle tire to comprise novelty scented rubber, or even old and well known non-scented rubber, for the normal wear components of a given tire, such as for the tread, until the tire becomes worn to a level predetermined to warrant replacement. At the predetermined wear level, a different, wear warning scented rubber compound is presented, where the emergence of the scented material releases a warning aroma comprising any desired severity. The predetermined wear level could comprise any desired parameter such as any percentage of remaining tire tread, or wear-through of any tire area or component. Such a scented rubber compound wear warning aroma could comprise any desired scent, such as a char smell, or a sulfuric smell, such as one resembling rotten eggs. Wear warning scents may comprise any other non-rubber components in addition to or in place of the scented rubber compound, such as having encapsulated means such as capsules or microcapsules of wear warning scent that expose and rupture due to wear embedded in the rubber itself, or in any of the non-rubber components of the tire, such as the steel belt or plies of the tire, or scenting the non-rubber components of the tire themselves, such as coating or formulating the steel belt or tire plies with wear warning scent. Such will be known as wear warning oriented rubber compounds, and wear warning oriented nonrubber components. As mentioned above, the tire may also comprise novelty scented rubber and/or non-rubber components in addition to rubber and/or non-rubber components comprising the wear warning scent. For instance, the outer circumference of the tire tread can have a pleasant cherry scent, whereas, say, the inside ten percent of the circumference of the tire tread, or the exposed surface of a ply or a belt on a severely worn tire, can give off a sulfuric stench.

The wear warning scent acts as a type of wear warning means. Another type of wear warning means that may be emitted is in the form of a visible wear warning, that is rendered visible in the form of a smoke, powder, or viscous solution that oozes out over the tire. Any means for rendering a visible wear warning may be employed, such as friction against a newly exposed rubber compound or non-rubber component comprising the visible wear warning means, the exposing and rupturing due to wear of encapsulated means such as capsules or microcapsules that releases the visible wear warning means, etc. In the case of smoke, the smoke may comprise any color, which is useful in helping an end user identify the source of the smoke. For example, a visible wear warning means may comprise bright red smoke, which would alleviate concern that the smoke is due to an engine problem, being that engine problems tend to not produce bright red colored smoke. A powder, such as a bright pink powder that optionally leaves a residue on the tire, may be used. In the case of the viscous solution that oozes out of the tire, the viscous solution may comprise any desired composition, color, or viscosity, preferably one that can easily be removed from car finishes.

Also, it is disclosed as an option to have the intensity of the wear warning means to be proportional to the wear level of the wear warning means. Simply stated, the more severe the wear, the more apparent or intense the wear warning means becomes.

An option for a given tire manufacturer is to offer colored tires comprising novelty scented rubber compound that is colored in accordance to the scent of the novelty scented rubber compound, such as red for a cherry scented tire, orange for an orange scented tire, yellow for lemon or banana scented tire, etc. The tire may comprise colored rubber only, such as where the entire tire is red or orange; or, the tire may comprise a colored feature,

so instead of having a "whitewall" tire with a band of white material, end users can have an "orange wall" tire with a band of orange material, all while the tire gives off the aroma of oranges. Also, it is possible to modify the above to have a colored scented tire where the color and the novelty scent are incongruous, such as having a blue tire that gives off the aroma of vanilla, or a pink tire that gives off the aroma of chocolate.

Another means by which to scent the tire is by using a plug or an insert, where the plug comprises erodible material comprising at least one novelty scent or fragrance and/or pheromone. For purposes of this disclosure, such a plug or insert comprising novelty scent or fragrance will be referred to as a novelty plug or insert. A novelty scented plug may be scented using any of the means disclosed earlier for the scented material/formulation compound. As will be seen, the novelty plug or insert is useful for scenting purposes, or for purposes in addition to, or in place of scenting purposes. While the preferred embodiments comprise novelty scent or fragrance and/or pheromones, numerous potential embodiments may include novelty plugs or inserts that do not comprise novelty scent or fragrance and/or pheromones, but employ other attributes that will be disclosed.

The novelty plug or insert is intended to be installable on the outside surface of a tire. While theoretically the novelty plug or insert should be installable anywhere on the outside surface of the tire, it is apparent that the most optimal situation would place the novelty plug or insert comprising erodible material in the tread of the tire, with the novelty plug or insert exposed and visible on the tire's tread. Such an embodiment would permit friction and heat build-up, as well as wear, that would stimulate the release of the novelty scent or fragrance. For this reason, it is preferred that the outside surface of the novelty plug or insert be flush with the outside tire surface, and not be recessed in any way. The novelty plug or insert can be installed on the disclosed vehicle tire that comprises novelty scented rubber compound and/or novelty scented non-rubber component, and/or pheromones, and/or wear warning oriented rubber compound and/or wear warning oriented non-rubber components, or it may be installed on tires that do not comprise any one or all of the abovementioned attributes.

The novelty plug or insert can comprise any shape, design, size or depth. For example, the novelty plug or insert may appear in the tire as being circular in shape, a quarter inch wide and a quarter inch deep; or, shaped like the State of Texas, an inch across; or, can comprise a lined design, such as a Celtic symbol an inch and a half high. Also, the novelty plug or insert can comprise any embodiment of an "O" ring around the tread circumference or tire wall diameter of the vehicle tire. Also, a given "O" ring could even be elastic or semi-elastic, and perhaps have qualities similar to a rubber band or an elastic hair band that can be stretched on or off the tire, and can be easily replaced at will.

The novelty plug or insert can comprise any color, or if desired, colors. The novelty plug or insert can comprise any erodible material composition; however, the erodible material that is ultimately used should be carefully considered, because if the erodible material is too hard compared to the tire rubber, excess noise and/or a rough ride can result. If the erodible material is too soft, then excess road debris can get lodged in the erodible material. A good choice among the many potentially usable erodible materials would be compounds comprising silica that enable scenting, coloration, and other manipulations.

The erodible material composition can also comprise novelty with regard to the appearance of the novelty plug or insert, which will be known as a novelty visual aspect. A novelty visual aspect comprises any unique or interesting appearance item or items. Such items may be reflective, refractive, sparkling, shining, holographic, jewel-like, luminescent, pearlescent, fluorescent, glow-in-the dark, etc. For instance, the erodible material composition could comprise silver glitter, tiny glass reflective beads similar to those used in road signs, or day-glow fluorescent orange reflective material, any of which would visually "pop" on a rotating tire, especially at night with headlights shined on the tire.

The novelty plug or insert can also comprise a wear warning plug or insert, where the wear warning plug or insert is able to be oriented in the tire in such a way that allows deployment to occur at a predetermined level of tire wear. The wear warning plug or

insert can comprise any erodible material composition that uses wear warning means, such as wear warning scent, and/or visible wear warning colored or non-colored smoke. Also, the wear warning plug or insert may use, in addition to or in place of the erodible material composition that uses wear warning means, any encapsulated means, where the encapsulated means uses capsules or microcapsules that rupture due to wear and exposure, thereby releasing wear warning means comprising wear warning scent, and/or either visible wear warning non-colored/colored smoke, visible wear warning powder that can optionally leave a residue, or visible wear warning viscous solution comprising any composition, color, or viscosity. Smoke may be attained using any means, such as through a chemical reaction, or the release of a powder that deploys airborne particles. Furthermore, it may be desirable to have the intensity of the wear warning means proportional to the wear level of the vehicle tire and/or wear warning means, as in the more severe the wear, the more apparent or intense the wear warning means becomes.

A singular novelty plug or insert can be as simple or sophisticated as desired, and may comprise any one, or any combination or permutation comprising more than one, of the following attributes: at least one erodible material; at least one color; at least one novelty scent and/or fragrance; at least one pheromone; at least one novelty visual aspect; or at least one wear warning means.

The novelty plug or insert may comprise a plug or insert comprising multi-sectional construction, where a singular novelty plug or insert comprises two or more sections, where any one given section, or even two or more sections, can be oriented either along the depth of the novelty plug or insert, and/or along or across the surface area that is visible on the tire after installation (where the two or more sections are side by side; or, where two or more sections are side by side, over top of a third section that is hidden underneath). Furthermore, any one given section can comprise any one, or any combination or permutation comprising more than one, of the following attributes: at least one erodible material; at least one color; at least one novelty scent and/or fragrance; at least one pheromone; at least one novelty visual aspect; or at least one wear warning means. The combinations are endless and versatile. For instance, a singular novelty plug

or insert comprising two sections (a top and bottom section) along the depth can have a cherry scented *red* glitter section adjacent to the tread surface of a new tire; then, when the tire and the novelty plug or insert both wear down, the bottom section of the novelty plug or insert comprising a lemon scented *yellow* glitter section is revealed. Likewise, the top section of a novelty plug or insert can comprise pink glitter that smells like bubblegum, or be just an unscented black top section, that wears down to the abovementioned wear warning mechanism that gives off a blue residue powder or orange smoke, and smells like dead fish.

As mentioned earlier, the plug or insert can be installed on the disclosed vehicle tire that comprises novelty scented rubber compound and/or novelty scented non-rubber component, and/or pheromones, and/or wear warning oriented rubber compound and/or wear warning oriented non-rubber components, or it may be installed on tires not comprising any of the abovementioned attributes. What is important is that the vehicle tire comprises at least one void anywhere on the outside surface of the tire, where the void comprises a receptacle that is intended for and allows for the insertion of at least one novelty plug or insert. A given void or receptacle can comprise a hole of any shape, design, directional orientation, size, or depth. Also, a void can comprise a groove, channel, or crevice comprising any shape, design, design pattern, directional orientation, size, or depth. Furthermore, it is possible that a groove, channel, or crevice can be formed on the vehicle tire to accommodate a novelty plug or insert comprising any embodiment of an "O" ring around any part of the tire, such as around the circumference of the tire tread, around the diameter of the sidewall of the vehicle tire, etc. It may be desirable for a given void or receptacle to accommodate two or more novelty plugs or inserts, either along the depth of said void, side-by-side along/across the opening gap of said void, or both. Such could be useful in a situation where a singular novelty plug or insert comprising wear warning means is situated beneath a singular novelty plug or insert comprising a pheromone.

Making the novelty scented plugs or inserts may comprise solid plugs or inserts that are formed by any forming means including plugs or inserts that comprise any means of

molding, casting, die cutting, extruding and cutting, molding and cutting, casting and cutting, etc. For example, a given plug or insert may be injection molded into the desired shape.

Similar means may be adapted to make multi-sectional novelty scented plugs or inserts. For example, the first such material comprising color/scent/pheromones/visual aspects/etc., can be placed in a mold and be subsequently covered by the second, third, etc., similar or different materials while still in the mold; or two or more materials can be inserted side-by-side in the mold, with or without being oriented on top of one or more additional materials in the mold; two or more materials can be placed side by side and/or layered on top of one another and then die-cut; or two or more materials can be placed side by side and/or layered on top of one another and extruded one or more times, and then cut.

Also with regard to the multi-sectional plug, two or more materials can be formed separately, and then joined, such as forming a cherry scented insert, and joining it with a capsule that releases a wear warning means when ruptured.

Also, novelty scented plugs or inserts may comprise semi-solids that are introduced into the void(s) or receptacle(s) using any void-filling means such as pouring, pumping, injecting, spraying, etc., where the semi-solids subsequently dry and harden into a solid, much in the way glues or caulks do; or, may comprise semi-solids that are heated, and subsequently cool and harden, such as molten metals or hot glues. Multi-sectional novelty scented plugs or inserts using semi-solids may be attained by layering or combining different semi-solid materials, much in the same manner that solid multi-sectional plugs are configured, where said semi-solids are either layered or combined prior to being placed in the void(s) or receptacle(s), or where the semi-solids are layered or combined in the actual void(s) or receptacle(s).

Voids in the tire may occur using any void creating means. For example, the void(s) may be molded along with the basic shape of the tire during the manufacturing process, or the void(s) can be created by void creating means such as milling, drilling, etc. It is intended

that a given novelty plug or insert is designed, or is able to be modified, to be inserted or installed in a corresponding void or receptacle of the vehicle tire by any possible inserting or installing means, either automatically by machine, or by hand with or without the use of tools. Also, it is intended that a given novelty plug or insert can be secured in the corresponding void or receptacle of the vehicle tire using any securing means, at any time before, during or after vulcanization of the tire, using any means such as where said novelty plug or insert is integrated, glued in, pressure-fitted, heat set, screwed in, set using grooves or serrations on the plug and/or the tire, injected, poured, etc. Finally, it could possibly be desirable that a given novelty plug or insert be removed from the vehicle tire for whatever reason. Any removal means may be contemplated as an antidote to overcome prior installation, even if such removal means are as basic as using a drill or a dremel tool to remove the novelty plug or insert, or where a given elastic or semi-elastic "O" ring can be stretched off the tire, and may be replaced just as easily.

Novelty plugs or inserts may be either factory installed on the vehicle tire prior, during, or after the vulcanization process, or may be installed on the vehicle tire by non-factory aftermarket installers, such as tire retailers, mechanics, customizers, end users, etc.

Installation may comprise any number and/or combination of different novelty plugs or inserts, where differences comprising a given novelty plug or insert can comprise any variation with regards to any one or more of the following: erodible material(s); color(s); novelty scent(s) and/or fragrance(s); pheromone(s); novelty visual aspect(s); wear warning means, single section construction versus multi-sectional construction, etc., where the use of different novelty plugs or inserts allows for the customization of said vehicle tire to comprise endless variants and permutations, such as having a singular tire that comprises forty voids with forty corresponding novelty plugs or inserts, where ten of the novelty plugs or inserts are red sparkle cherry scented, ten of the novelty plugs or inserts are blue sparkle berry scented, with the remaining ten of the novelty plugs or inserts comprising wear warning means. The end result becomes a patriotic red, white, and blue tire that smells like a fruit salad, that also knows when it is time to quit.

Novelty scented plugs or inserts, or the semi-solid scented plug or insert material, can be made available and/or sold as a separately offered aftermarket item or items, to allow customization of the disclosed vehicle tire comprising at least one void by aftermarket installers. Also, the disclosed novelty plugs or inserts, or the semi-solid scented plug or insert material, can be used to customize tires *other* than the disclosed vehicle tire comprising at least one void through the modification of tires other than the disclosed vehicle tire, where the modification comprises the aftermarket installation of voids by any void creating means, such as by milling or drilling the void(s) in the tire.

Also, novelty scented plug or insert material that takes the form of semi-solids which harden, either by drying, or cooling, or both, that are made available to aftermarket entities can be made available in any kind of can, bottle, tube or similar vessel, such as tubes that use a caulk gun for expelling the semi-solid, or screw-top tubes or squeeze bottles, or cans similar to those used for paint. Also, such semi-solid material can already have scent/fragrance and/or pheromones, as well as color, visual aspects, encapsulated smoking means, etc., already mixed in; or, scent/fragrance and/or pheromones/color/visual aspects/smoking means, etc. can be added to the semi-solid material that does not yet comprise such attributes by aftermarket entities.

Modifications and variations within the scope of the disclosure should be apparent to those with skill in the art.